28826—Continued.

of bone dust, 5 hundredweight of superphosphate, and 3 hundredweight of potash, making 15 hundredweight to an acre. If the winter is fairly warm a winter crop can be grown by cutting off the lateral growth a foot below the wires in the late spring or early summer and then manuring, but if the winter is not mild I would simply go in for the natural summer crop—prune as above late in winter and manure early in spring. The vines are raised in seed boxes from the seed. Simply wash the pulp out of the fruit and dry the seed; plant out when about 6 inches high. Do not allow any lateral growth until the wires are reached. We plant in Australia about the end of September or the beginning of October. Shelter young plants until they get started. Some fruit will be obtained the first season and a full crop the second season. The vines are about done in four years. The passion flower does wonderfully well in the sandstone country around Sydney, yet it grows almost wild in the semitropical climate of the northern rivers of New South Wales." (James Moody, Toomuc Valley Orchards, Melbourne, Australia.)

See Nos. 1906 and 12899 for description.

28827 and 28828.

From Puerto de Orotava, Teneriffe, Canary Islands. Presented by Dr. George V. Perez. Received September 16, 1910.

Seeds of the following:

28827. Cytisus proliferus L.

Tagasaste.

Variety palmensis. "This is a splendid forage plant and very drought resisting. The failures with it are due to ignorance of farmers and to not cutting back the plant. Cattle and horses have to learn to eat it; they relish it ever after. In the island of Palma (Canary Islands), where it is native from time immemorial, it has been used with the greatest success possible. It is quite as nutritious as lucern and does not want irrigation. I know of nothing that will fatten cattle and horses so much. In Palma there are large districts planted with it where cattle and even pigs eat it at liberty. Chaffed and mixed with straw it is excellent. The seed must be scalded in boiling water before sowing." (Perez.)

28828. ECHIUM SIMPLEX DC.

"The so-called *Pride of Teneriffe*, a lovely, showy, native plant, remarkable for its single tall spike of white flowers reaching from 2 to 3 yards high. From what I have seen and observed I have come to the conclusion that besides being a very ornamental plant it could be turned into a most valuable fodder, beating the prickly comfrey, over which it has the advantage, like all plants of the Canary flora, of being drought resistant. The idea is entirely my own after watching in one of my properties how greedily my cows eat it." (*Perez.*)

28829 to 28832.

From Togo, Africa. Presented by Mr. G. H. Pape, through Mr. A. B. Conner, scientific assistant, Chillicothe, Tex. Received September 29, 1910.

Seeds of the following:

28829. Vigna unguiculata (L.) Walp.

Cowpea.

Tan.

28830 to 28832. Voandzeia subterranea (L.) Thouars. Woandsu. 223